

Accelerated Math
Operations with Rational Numbers in Decimal Form
(Not in our textbook)

When you add or subtract decimals, you must line up the decimal points.

Examples:

$-3.67 + 14.1$ $\begin{array}{r} 3.10 \\ 14.10 \\ - 3.67 \\ \hline 10.43 \end{array}$ <p>Subt Ans pos</p> <p>10.43</p>	$-8.2 - 135$ $\begin{array}{r} -8.2 \\ + 135.0 \\ \hline 143.2 \end{array}$ <p>Add Ans. neg</p> <p>-143.2</p>	$8.025 - 478.1$ $\begin{array}{r} 8.025 \\ - 478.100 \\ \hline 470.075 \end{array}$ <p>Subtract Ans. neg</p> <p>-470.075</p>	$17.35 + -4.9$ $\begin{array}{r} 17.35 \\ - 4.90 \\ \hline 12.45 \end{array}$ <p>Subtract Ans pos</p> <p>12.45</p>
--	---	--	--

When you multiply decimal numbers, line up the right side of the numbers (not necessarily the decimal points) $neg \cdot pos = neg$ $neg \cdot neg = pos$

Examples:

125×0.06 $\begin{array}{r} 125 \\ \times 0.06 \\ \hline 750 \end{array}$ <p>(1) (2) (2)</p> <p>7.5</p>	-6.4×1.09 $\begin{array}{r} 6.4 \\ \times 1.09 \\ \hline 576 \\ 6400 \\ \hline 6.976 \end{array}$ <p>(1) (2) (3)</p> <p>-6.976</p>	-0.25×-0.0006 $\begin{array}{r} .0006 \\ \times .25 \\ \hline 30 \\ 1200 \\ \hline .000150 \end{array}$ <p>(4) (2) (6)</p> <p>0.000150</p>
---	---	---

When you divide decimal numbers, make sure the divisor is a whole number. If it is not, then multiply the divisor and dividend by the same power of ten.

Examples:

$-850 \div 1.7$ $\begin{array}{r} -850 \\ \div 1.7 \\ \hline 500 \\ - 850 \\ \hline -500 \end{array}$ <p>-500</p>	$43.8 \div 0.02$ $\begin{array}{r} 2190 \\ 2 \overline{) 4380} \end{array}$ <p>2190</p>	$-0.006 \div -1.2$ $\begin{array}{r} 0.005 \\ 1.2 \overline{) 0.006} \end{array}$ <p>0.005</p>
---	---	--

Practice

$-2.4 - 8.3 + 20$ $\begin{array}{r} -2.4 \\ - 8.3 \\ + 20 \\ \hline 9.3 \end{array}$ <p>9.3</p>	$4.3 - 12 + -4.25$ $\begin{array}{r} 4.3 \\ - 12 \\ - 4.25 \\ \hline 16.25 \\ - 4.3 \\ \hline 11.95 \end{array}$ <p>Subt Ans neg</p> <p>-11.95</p>
$(-1.2)^2$ (-1.2) (-1.2) $\begin{array}{r} 1.2 \\ \times 1.2 \\ \hline 24 \\ 120 \\ \hline 1.44 \end{array}$ <p>(1) (1) (2)</p> <p>1.44</p>	$4.2 + -1.6$ $3.8 - 5.8$ $\begin{array}{r} 4.2 \\ - 1.6 \\ \hline 2.6 \\ - 5.8 \\ \hline -1.3 \end{array}$ <p>-1.3</p>